REMARKS

This application has been reviewed in light of the Office Action dated April 3, 2008. Claims 1, 4, 5, 8, 9, 12, 13 and 16-21 are presented for examination, of which Claims 1, 5, 9, 13 and 16-20 are in independent form. All the claims have been amended, to define still more clearly what Applicant regards as his invention. Favorable reconsideration is respectfully requested.

In the outstanding Office Action, Claims 1, 5, 9, 13, 17-21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Applicant has amended Claims 1, 5 and 21 to replace "can be" by "is" and "can receive" by "receives" to remove the alleged indefiniteness. Accordingly, withdrawal of this rejection is respectfully requested.

In addition, Claims 1, 4, 9, 12, 17, 19 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,915,119 (Cone) in view of U.S. Patent 6,459,496 (Okazawa) and further in view of U.S. Patent 5,282,270 (Oppenheimer et al.).

As discussed in the specification, when a printer or other peripheral device in a network environment has been idle for a predetermined period, it may change into a sleep mode, where electric power is supplied only to a low-voltage LAN-controller as part of the peripheral device, to save power. However, in order to respond properly to device discovery requests from clients, the peripheral device normally needs to stay active, making it impossible to utilize its power-save feature. The present invention has been made to address this issue.

In one embodiment of the present invention, a printer registers with a central proxy server before it enters the sleep mode, to delegate the responsibility of responding to device discovery requests to the proxy server, and its LAN-controller is enabled to communicate with the proxy server and with a plurality of clients. The proxy server is configured to interact with a plurality of peripheral devices and clients. It responds to device discovery requests from clients on behalf of registered peripheral devices and releases such peripheral devices from the sleep mode upon client requests.

In addition, those discovery requests for active peripheral devices are distinguished from those for sleeping peripheral devices as they are directed to different multicast addresses. This enables the proxy server to listen and respond only to discovery requests for sleeping peripheral devices, which in turn limits the proxy server's workload and facilitates a client's identification of sleeping peripheral devices.

As amended, Claim 1 recites, among other features, "reception means for receiving a sleep release request from the proxy response server based on *a network packet indicating a discovery request for a peripheral device which has transitioned to a sleep mode* issued by any client device connected to the network after the proxy response server receives the sleep mode transition request from said notification means, wherein *the network packet is for a predetermined multicast address set for a plurality of peripheral devices; ... wherein the multicast address for a discovery request for peripheral devices in a sleep status is different from a multicast address for a discovery request for peripheral devices in a normal status* (emphasis added)."

Applicant submits that the features recited above are not disclosed or suggested in *Cone*, *Okazawa*, and *Oppenheimer*, considered separately or in any permissible combination.[1]

The Office action concedes that (1) "the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices," which introduces a multicast address for a discovery request for sleeping peripheral devices, is not disclosed in the combination of *Cone* and *Okazawa*. However, the Office Action states that (2) "the ['multicast' deleted by Examiner as compared with the previous claim language] address for a peripheral device discovery request in a sleep status can be different from an ['multicast' deleted by Examiner] address of a peripheral device discovery request in a normal status," which in its unedited form qualifies the multicast address for a discovery request for sleeping peripheral devices by comparing it with a multicast address for a discovery request for active peripheral devices, is disclosed in *Cone*. It is not clear to Applicant how to interpret (2), the edited version, because what is being claimed involves a "multicast address" for "discovering" sleeping peripheral devices and a separate "multicast

---

[1/]In response to the comments in Para. 13 of the Office Action, Applicant acknowledges skipping words in the Amendment of January 28, 2008. Applicant meant to say "the result of that combination would still *not* accommodate the multicast address for a peripheral device discovery request in a sleep status being different from a multicast address of a peripheral device discovery request in a normal status" on Page 17. This can been seen from the fact that the quoted portion was followed by "*nor* would that combination in any way suggest any arrangement in which the multicast address could be, or should be able to be, different from the multicast address of the peripheral device discovery request in a normal status" and from the context.

address" for "discovering" normal peripheral devices rather than any sorts of addresses somehow related to sleeping peripheral devices and normal peripheral devices.

As Applicant understands, *Cone* discloses that a user terminal's high-level network address may no longer be in the routing table at a later point in that it might be in the routing table at one point, but other user terminals' high-level network addresses may have overwritten this user terminal's over time, making it disappear from the routing table. In other words, *Cone* discusses merely the high-level network address of a sleeping device, which may *not* currently be in the routing table and thus may not be the same as a high-level network address in the routing table of another device which may be active. Therefore, even if it were proper to combine *Cone* (and *Okazawa*) with *Oppenheimer*, which might disclose 1. above and thus introduce multicast addresses, the result would not be that "the multicast address for a discovery request for peripheral devices in a sleep status is different from a multicast address for a discovery request for peripheral devices in a normal status."

In *Oppenheimer*, a multicast address is associated with each zone name on a given network so that a packet sent to the multicast address for a specific zone will reach all the nodes residing in the zone (see col. 14, lines 57-61, of *Oppenheimer*, for example). Applicant does not see any suggestion of using one multicast address for discovering sleeping peripheral devices and another for discovering active peripheral devices. Therefore, *Oppenheimer* does not remedy the deficiencies noted above.

Accordingly, Claim 1 is believed to be patentable over *Cone*, *Okazawa*, and *Oppenheimer*, considered separately or in any permissible combination.

Each of the other independent claims is believed to be allowable over those three patents for at least the reason discussed above with regard to Claim 1.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and allowance of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

/Leonard P Diana/
Leonard P. Diana
Attorney for Applicant
Registration No. 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

FCHS_WS 2263525v1